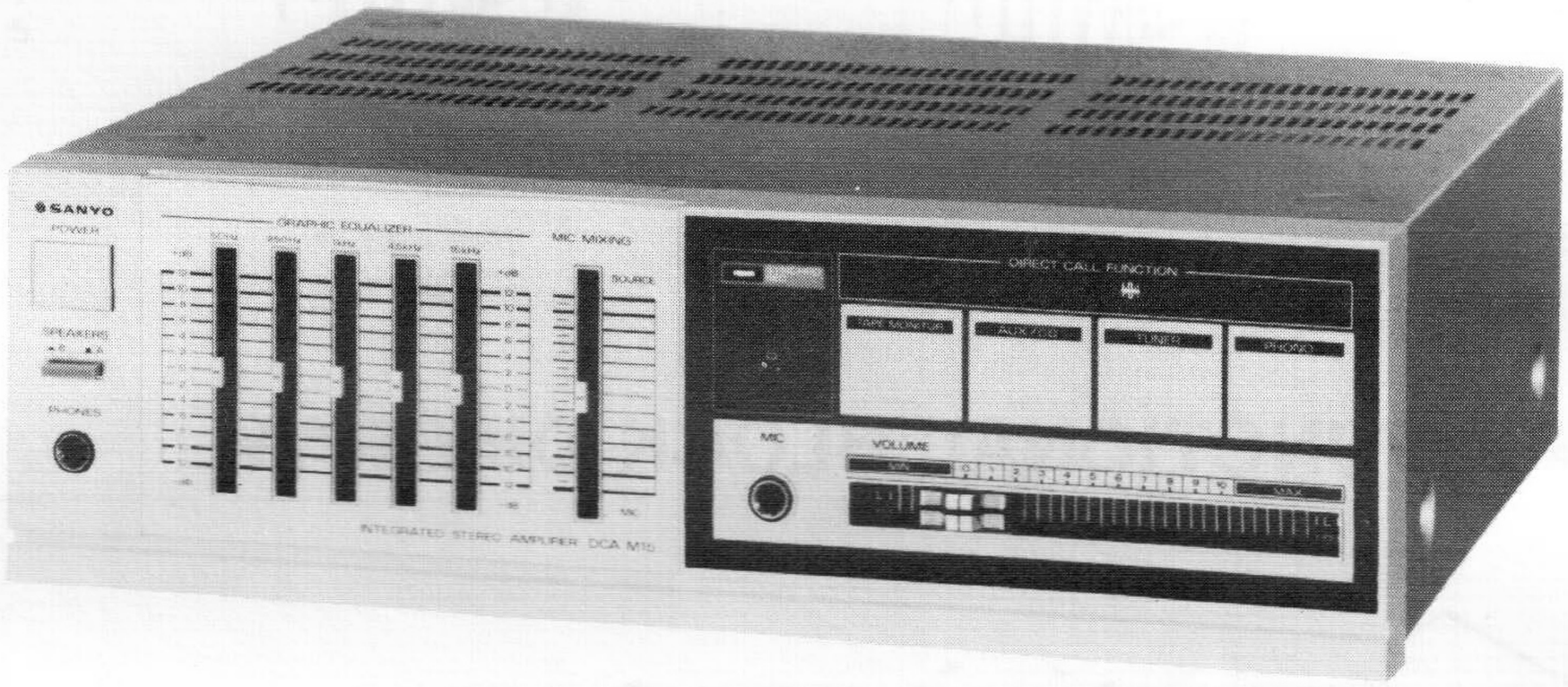
SERVICE MANUAL

SANYO

INTEGRATED STEREO AMPLIFIER

DCA M15 (EUROPE)



NOTE:
The photo on the cover shows the unit with a "SILVER" front panel. The "BLUE" version is identical in all respects.

SPECIFICATIONS

NOTE:
The below mentioned specifications are mainly based on the IHF measurements standard.
They can therefore not be compared directly with specifications based on the DIN standard or other standards.

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel, no more than stated distortion and with 8-ohm load at 1 kHz (DIN)	45 Watts
Total Harmonic Distortion	0.09 %
I.M. Distortion	0.09 %
Speaker Damping	> 25

PREAMPLIFIER SECTION

Frequency Response	
Phono (RIAA)	±0.5 dB
Aux (±1.0 dB)	20 Hz – 20 kHz
Microphone (±3 dB)	70 Hz – 4.5 kHz
Input Sensitivity/Impedance	
Phono	2.5 mV/50 kohms
Tuner	150 mV/50 kohms
Aux	150 mV/50 kohms
Tape	150 mV/50 kohms
Microphone	1.5 mV/7 kohms
Phono Max. Input Capability	120 mV
Graphic Equalizer	
50 Hz	±12 dB
250 Hz	±12 dB
1 kHz	±12 dB
4.5 kHz	±12 dB
15 kHz	±12 dB
Hum and Noise (IHF Short Circuit, A Network)	
Phono	72 dB
Tuner	80 dB
Aux	80 dB
Tape	80 dB
Microphone	64 dB

GENERAL

Power Requirements	AC: 110/220V, 50 Hz
Power Consumption	296 W
Dimensions (W x H x D)	335 x 108 x 257 mm
Weight (approx.)	5 kg

—Specifications are subject to change without notice.—

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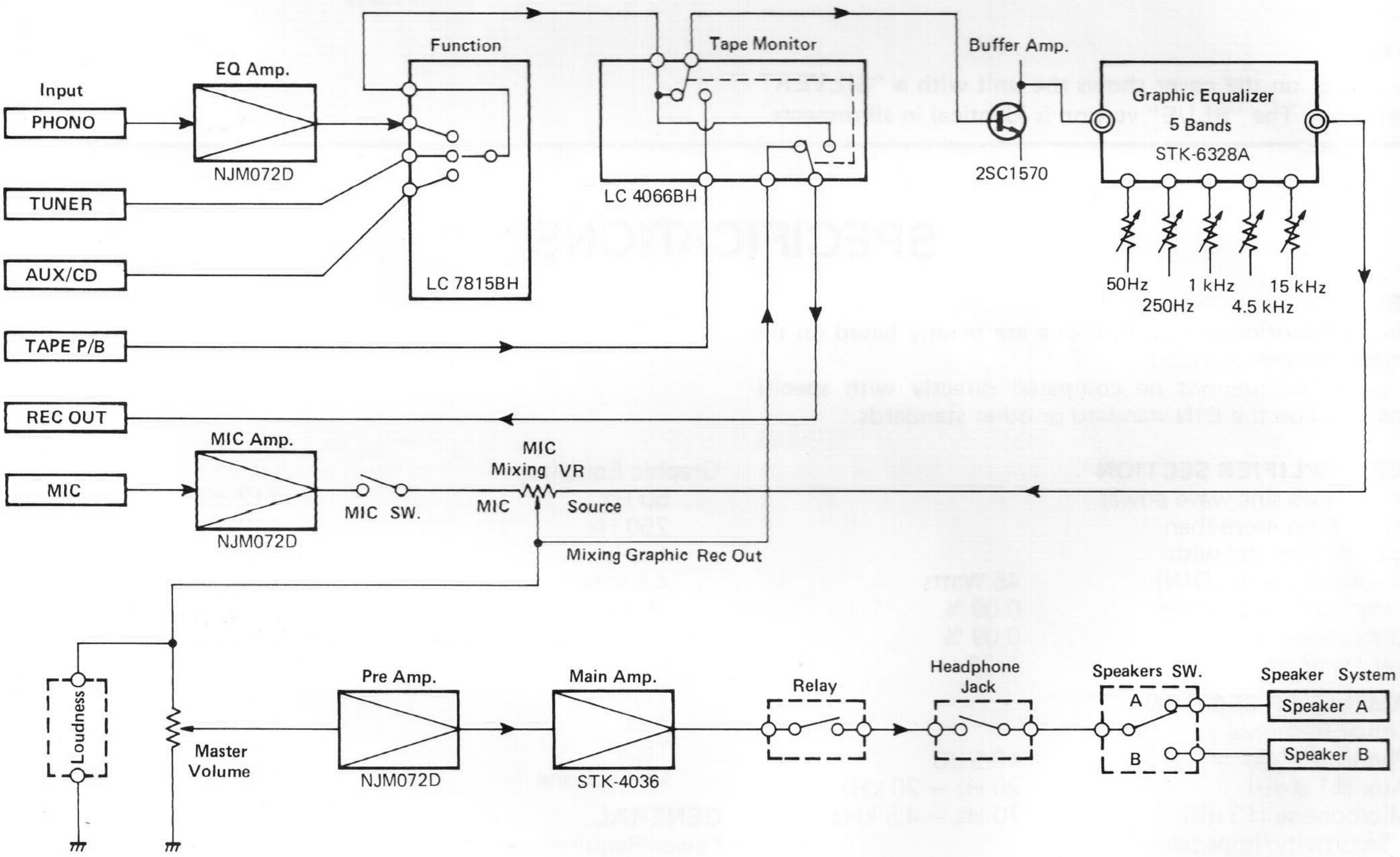
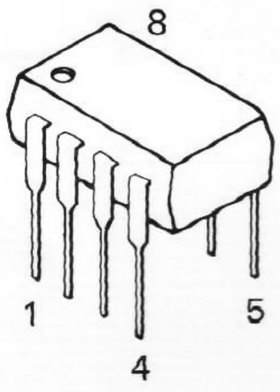
FUNCTIONAL BLOCK DIAGRAM



SEMICONDUCTOR LEAD IDENTIFICATION

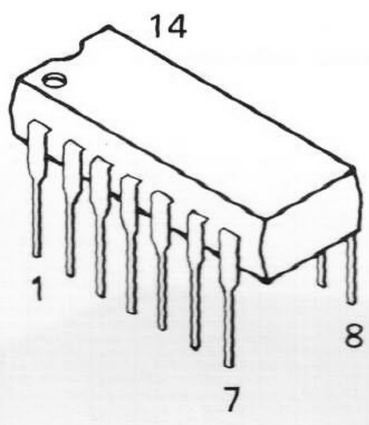
INTEGRATED CIRCUITS

PHONO/PREAMP MIC AMP IC



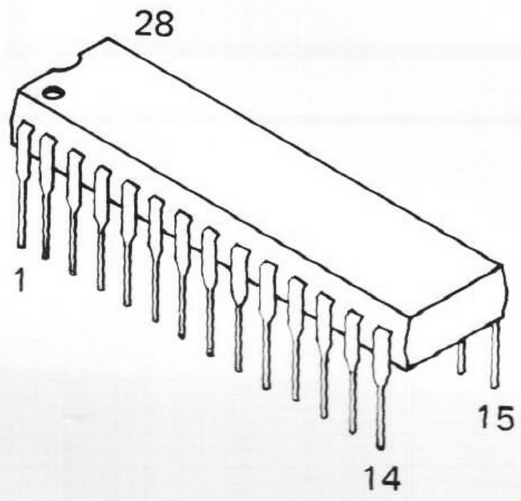
- NJM072D

TAPE SW IC (Quad Bilateral SW) DIAL D-TYPE FLIP-FLOP IC



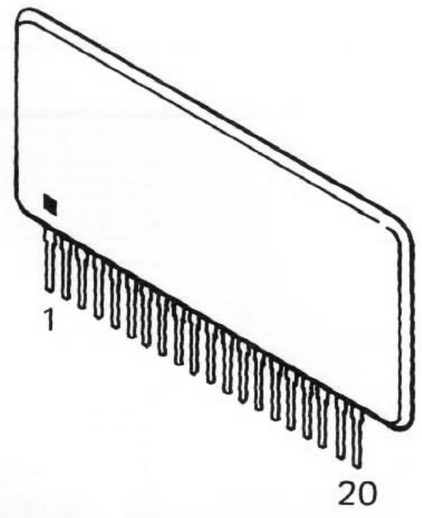
- LC4066B
- LC4013B

ANALOGUE FUNCTION SW IC



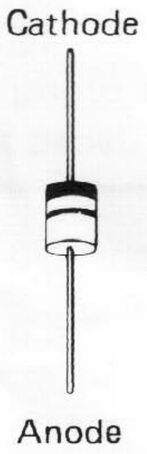
- LC7815H

GRAPHIC EQUALIZER IC



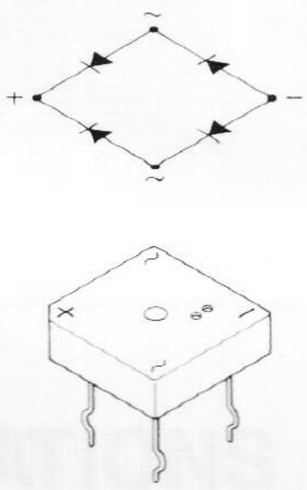
- STK6328A

DIODES



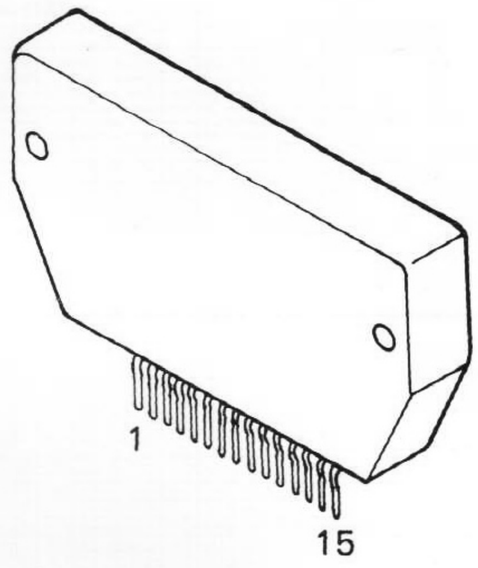
- DS-135D

- GMA-01
- GZA5.6X
- GZA11Z
- GZA20Z



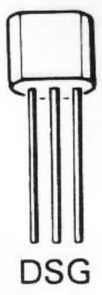
- DBA40C

POWER AMPLIFIER IC

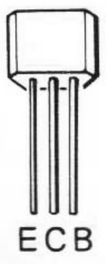


- STK4036

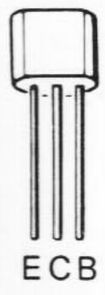
TRANSISTORS



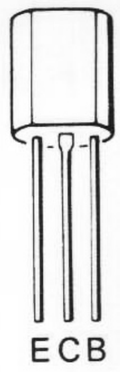
- 2SK330



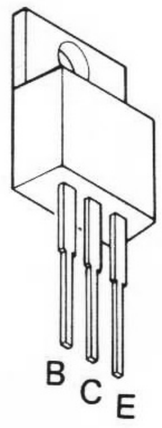
- 2SD1012



- 2SC536
- 2SC1570
- 2SA608



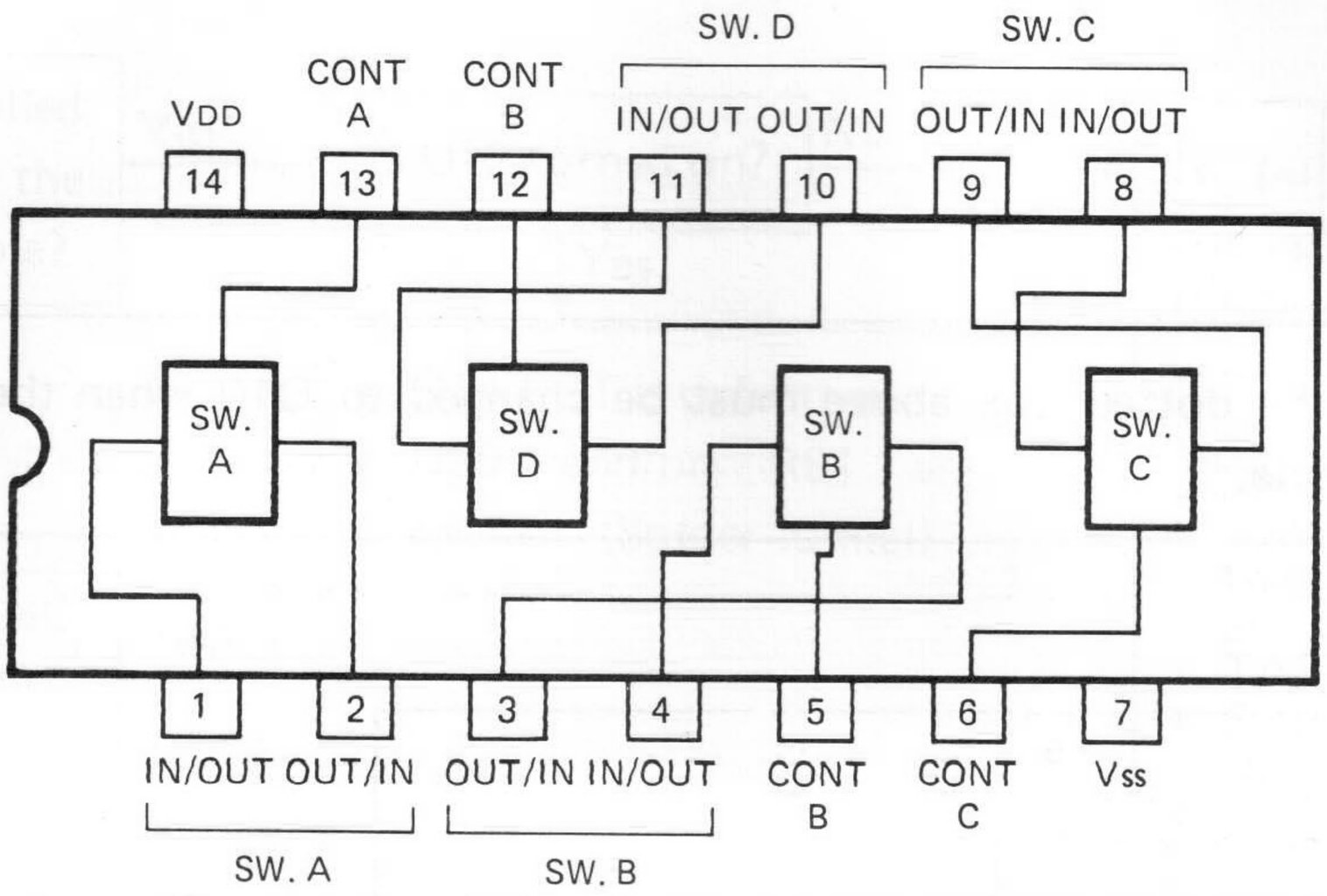
- 2SB560



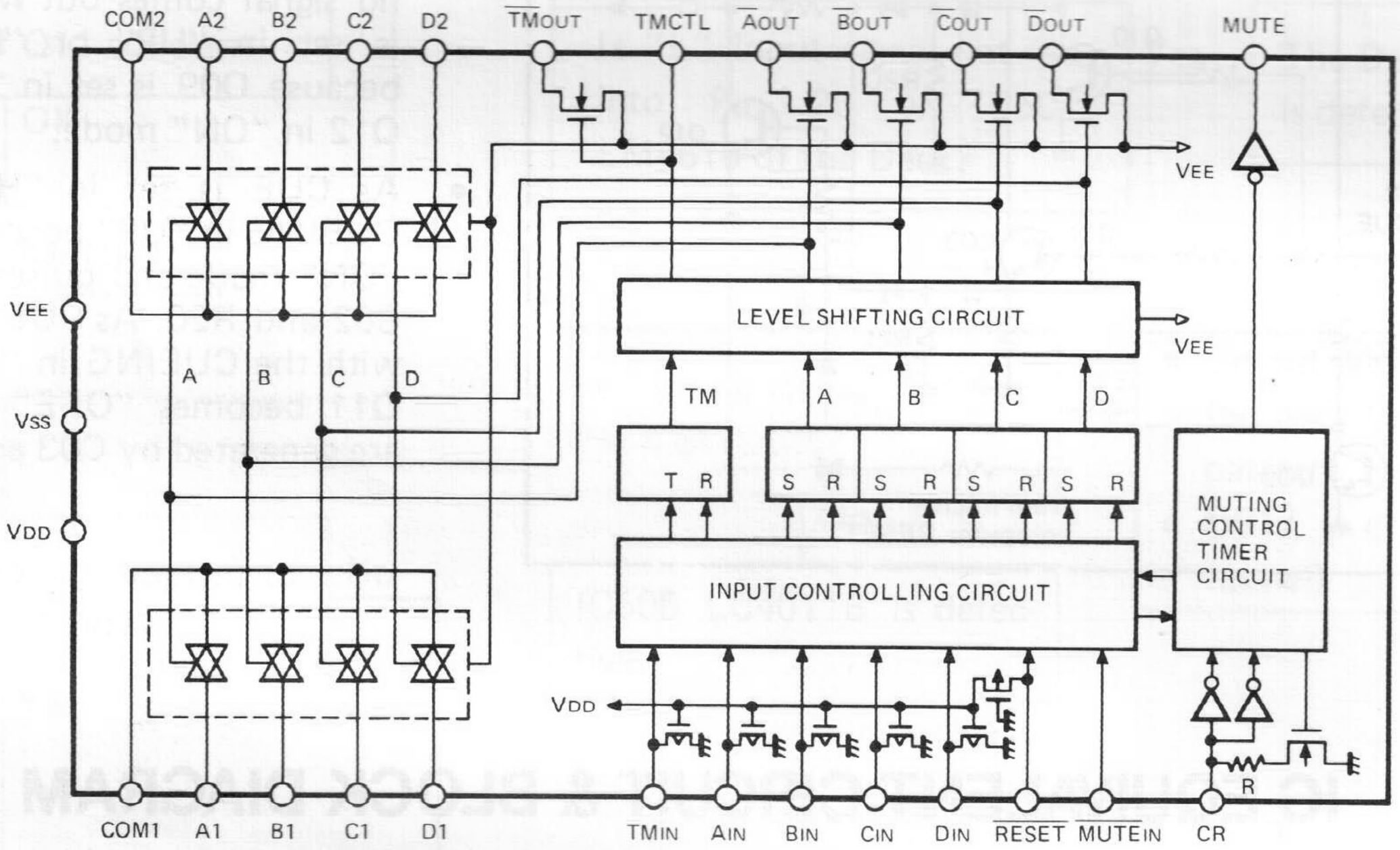
- 2SD330
- 2SB514

IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM (C

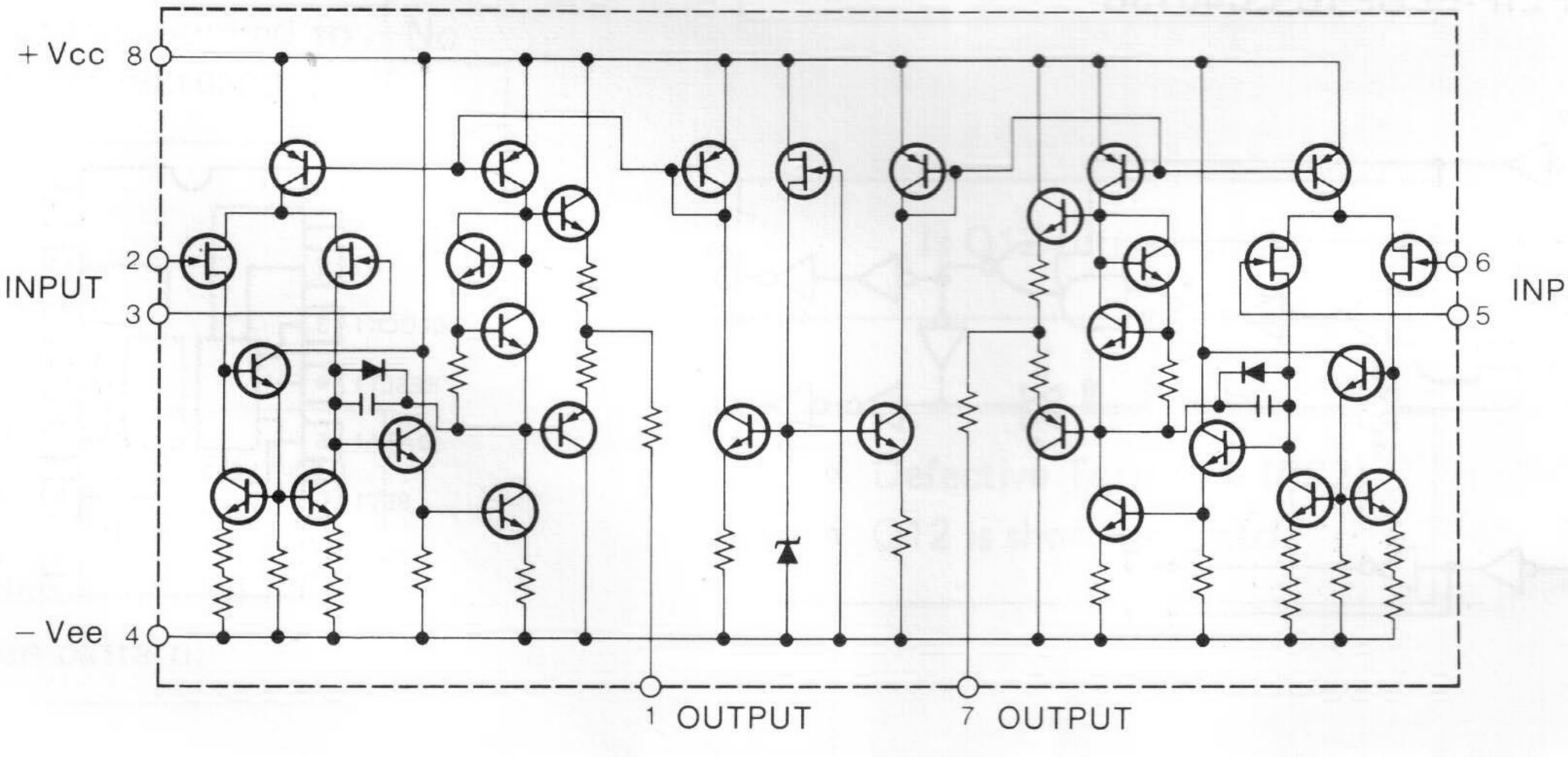
QUAD BILATERAL SWITCH IC LC4066BH



ANALOGUE FUNCTION SWITCH IC LC7815H

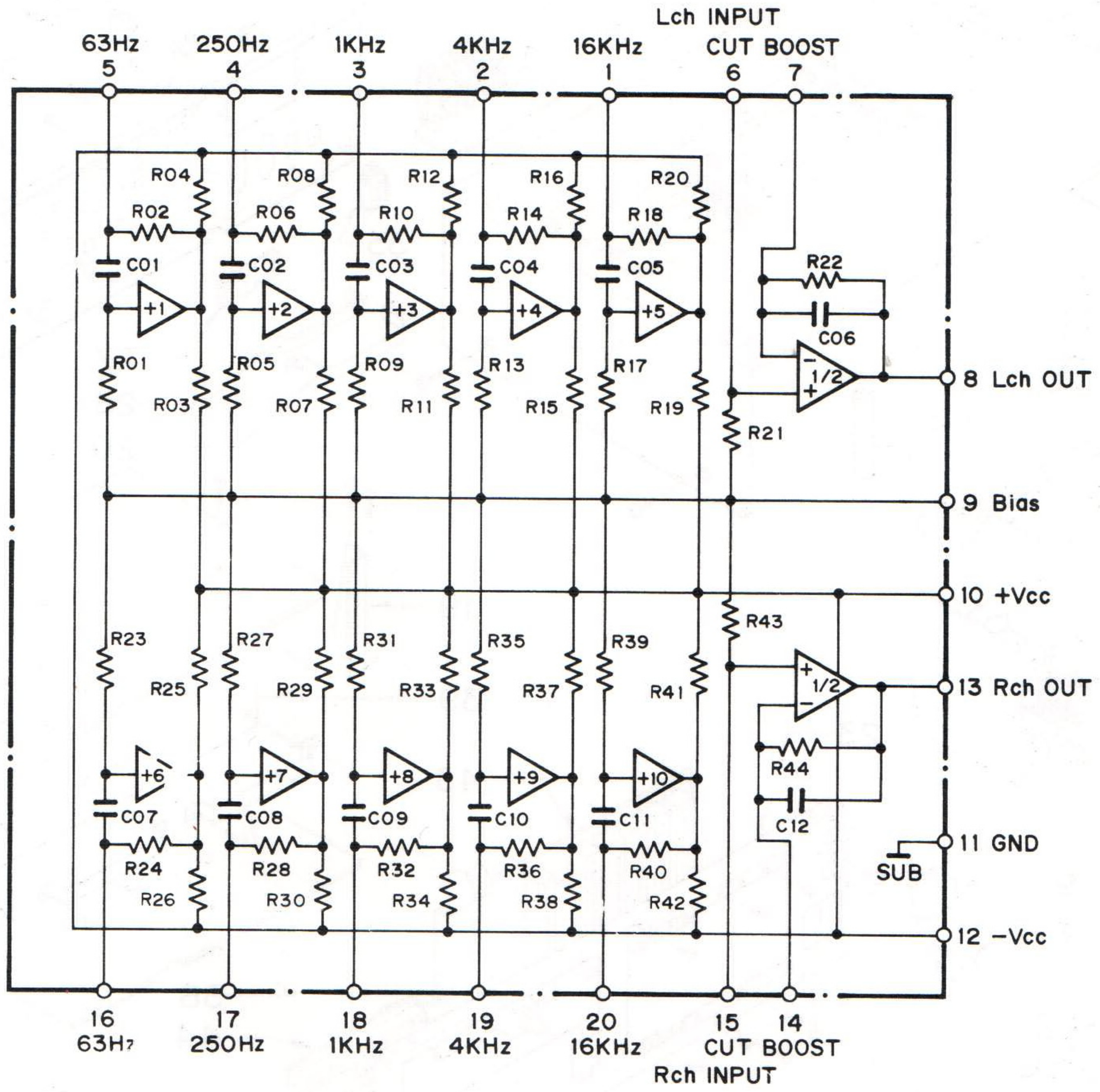


PHONO EQ/PREAMP MIC AMP IC NJM072D

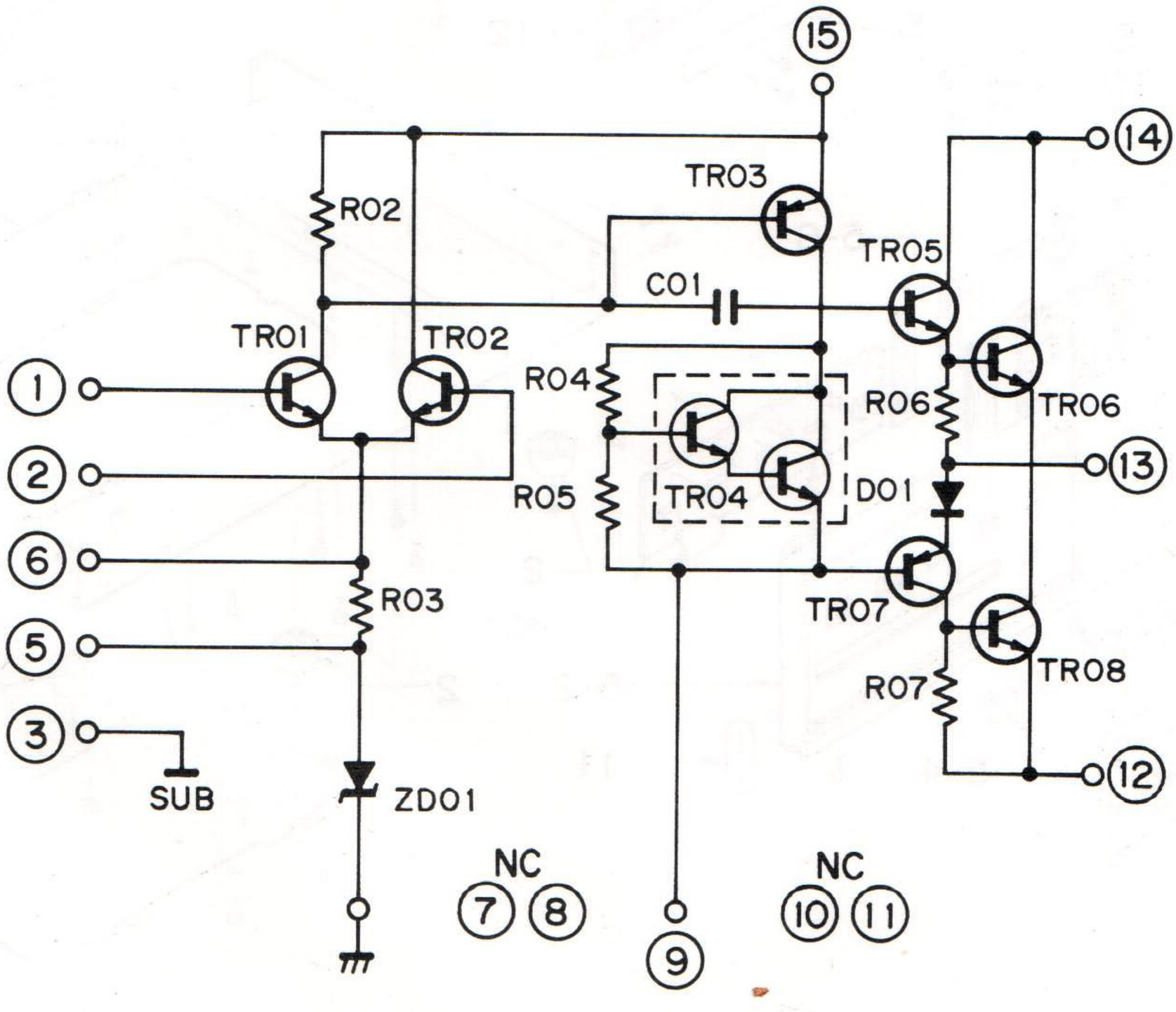


IC EQUIVALENT CIRCUIT & BLOCK DIAGRAM

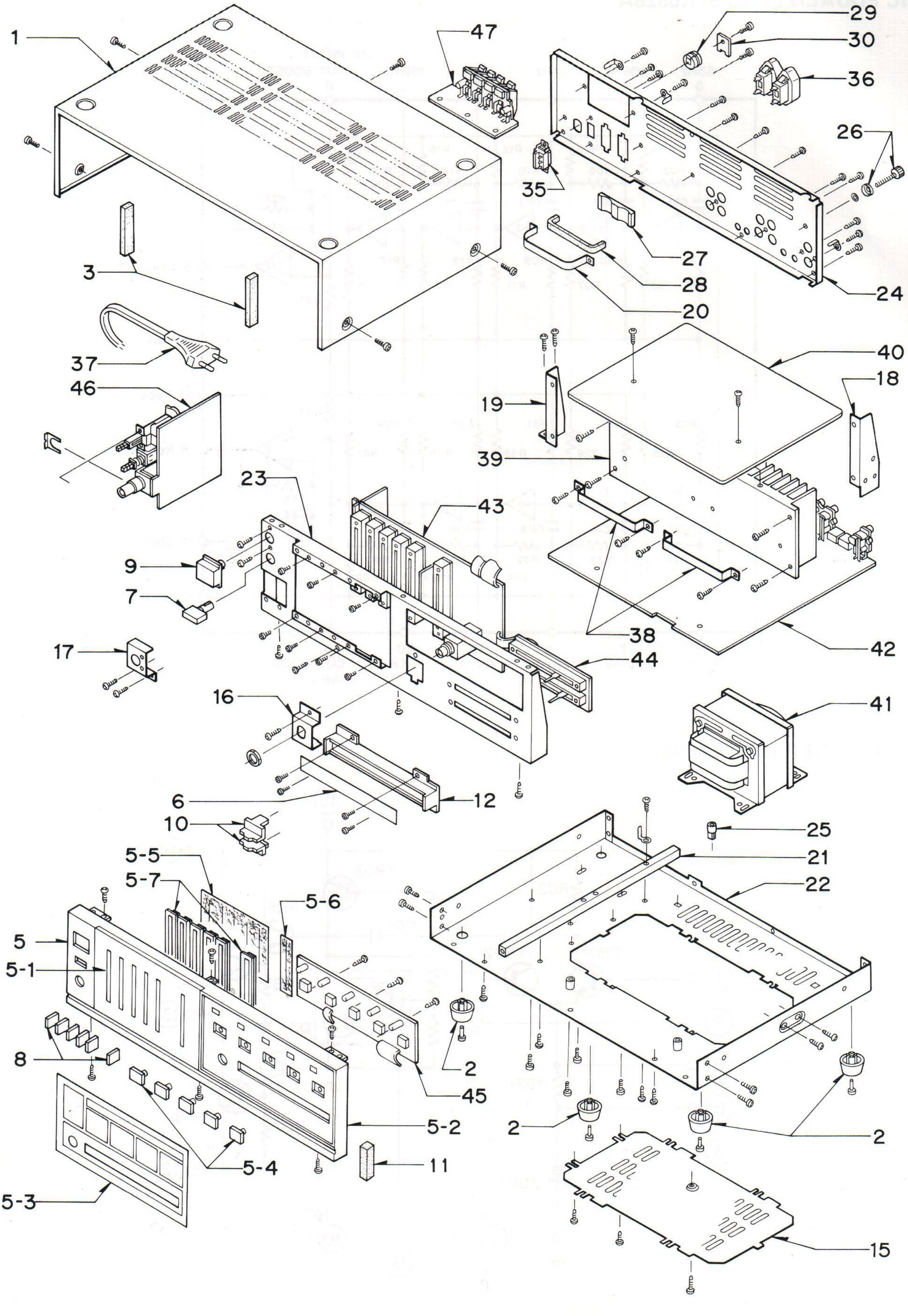
GRAPHIC EQUALIZER IC STK6328A

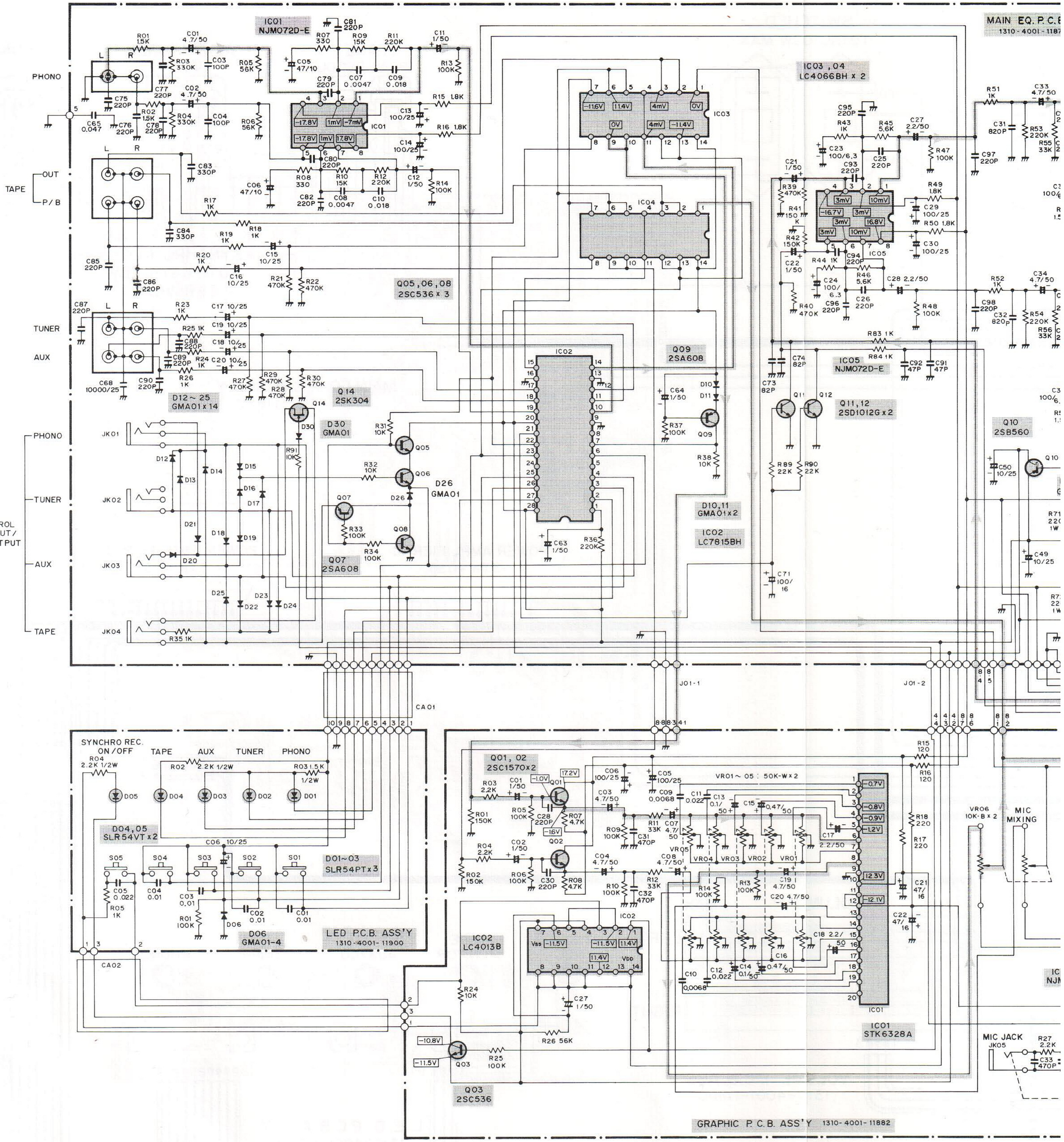


POWER AMPLIFIER IC STK4036



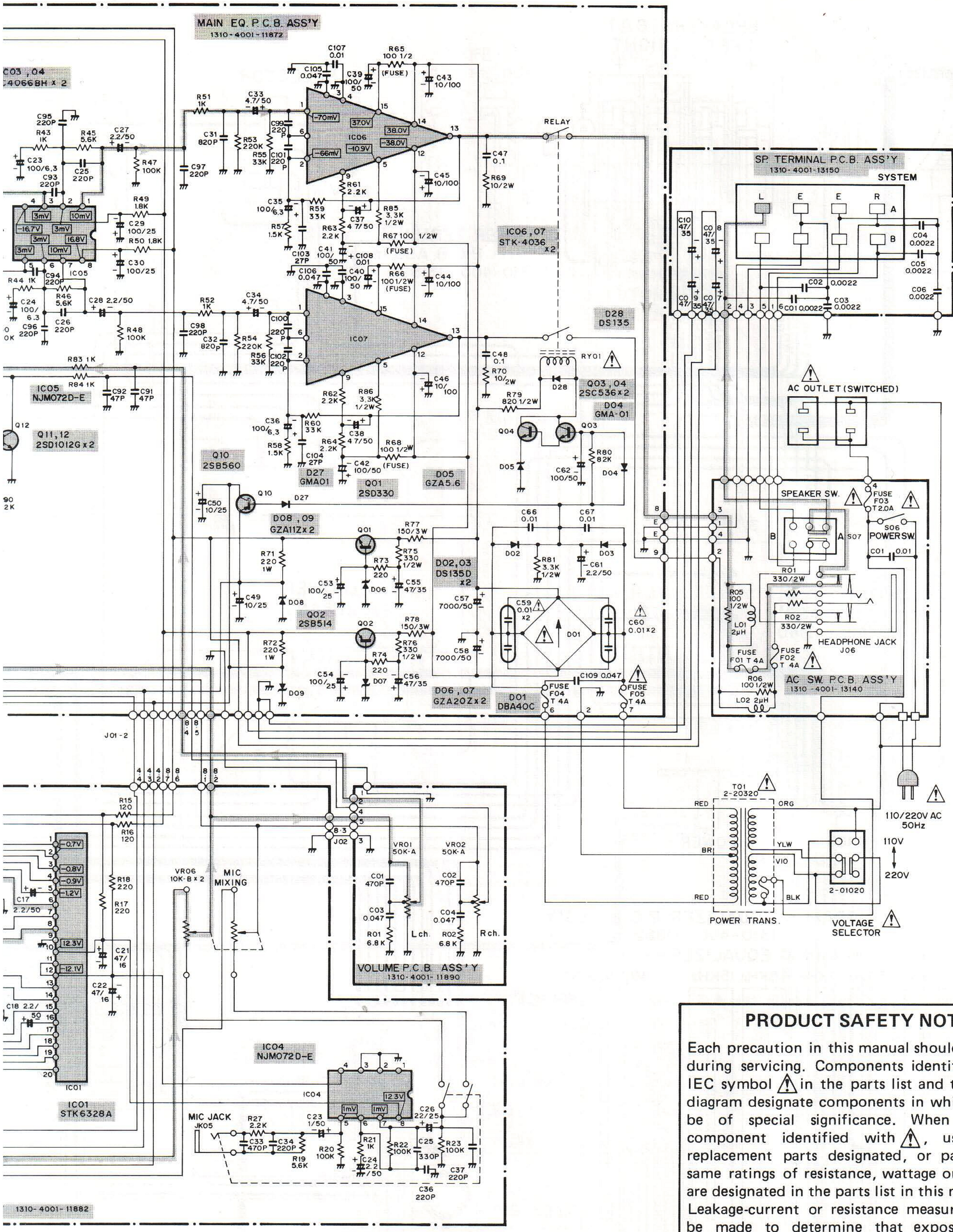
CABINET & CHASSIS EXPLODED VIEW





NOTES:

1. All resistors values are indicated in "ohm" (K=10^3, M=10^6).
2. All capacitors values are indicated in "μF" (P=10^{-12}).
3. All voltages indicated on the schematics are measured under the following conditions.
   a. Use a V.T.V.M.
   b. All voltages ±10% with respect to chassis ground
   c. AC input at 2
   d. FUNCTION S
   e. Input Signal:
   f. Load Resistar
      Output: 18 W
4. This is a basic sch



=10^6).

under the

c. AC input at 220 volts 50 Hz
d. FUNCTION SW: AUX
e. Input Signal: 1 kHz (Sine-wave)
f. Load Resistance: 8Ω
Output: 18 W + 18 W (12.0 V)

4. This is a basic schematic diagram.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.